

NAME: \_\_\_\_\_

E210

EXAM 3

FALL 2003

**Multiple Choice (3 points. each)**

Choose the one option that best answers each of the following questions. Mark your answers in the blanks provided **on this page**. You can use your calculators for calculations only, do not use them in text mode.

1. \_\_\_\_\_      4. \_\_\_\_\_      7. \_\_\_\_\_      10. \_\_\_\_\_      13. \_\_\_\_\_      16. \_\_\_\_\_  
2. \_\_\_\_\_      5. \_\_\_\_\_      8. \_\_\_\_\_      11. \_\_\_\_\_      14. \_\_\_\_\_      17. \_\_\_\_\_  
3. \_\_\_\_\_      6. \_\_\_\_\_      9. \_\_\_\_\_      12. \_\_\_\_\_      15. \_\_\_\_\_      18. \_\_\_\_\_

The data below show the output of bagels and movies for the economy of BAGMOV in which only these two goods are produced in the years 1 and 2. Also shown are the current prices of these final products and the base year prices. The output of bagels is measured per bagel and output of movies is measured in terms of the number of admissions sold. (DATA is used to answer questions 1 – 3).

<i>Year</i>	<i>Quantity of Bagels (in millions)</i>	<i>Quantity of Movie admissions (in millions)</i>	<i>Price of Bagels in Current Year</i>	<i>Price of Movie admissions in Current Year</i>	<i>Price of Bagels in Base Year</i>	<i>Price of Movie admissions in Base Year</i>
Year 1	10	3	\$0.50	\$6.00	\$0.25	\$5.00
Year 2	12	1	\$0.75	\$7.50	\$0.25	\$5.00

- From the data provided, what is the nominal GDP in Year 2 (ignore the quantity in millions for this calculation)?
  - \$23.00
  - \$17.50
  - \$16.50
  - \$ 8.00
- From the data provided, what is the real GDP in Year 1 (ignore the quantity in millions for this calculation)?
  - \$23.00
  - \$17.50
  - \$16.50
  - \$ 8.00
- From the data provided, what is the GDP deflator in year 1?
  - 106.1
  - 131.4
  - 139.4
  - 218.8

4. Which one of the following is an example of a person who would NOT be considered unemployed?
- A. Lucas, who is currently in prison for robbery.
  - B. Sarah, who has just graduated from technical school and is searching for a job.
  - C. Sue, who cannot find work so she volunteers at McDonald's children's hospital for 5 hours a week.
  - D. Bob, who lost his job as a high school teacher because of state government deficits due to a recession.
5. Which of the following would be considered part of GDP?
- A. The federal government's spending on social security payments.
  - B. The purchase of a "Babe Ruth" baseball card by a collector on e-Bay.
  - C. The purchase of 100 shares of Disney stock.
  - D. The purchase of daycare.
6. Which of the following would be considered a component of investment, by economists?
- A. The purchase of 100 shares of Disney stock.
  - B. The purchase of government bonds.
  - C. Earnings in a savings account.
  - D. An increase in inventory.
7. If the U.S. runs a trade deficit,
- A. U.S. imports are greater than U.S. exports.
  - B. U.S. exports are greater than U.S. imports.
  - C. U.S. sales of assets to foreigners are less than U.S. purchases of assets from less.
  - D. None of the above.
8. Which of the following is an example of a person who would be considered structurally unemployed?
- A. A person who is looking for work after graduating from college.
  - B. A person who is looking for work because there is a contraction in real GDP.
  - C. A person who is looking for work because the job skills they have are no longer needed.
  - D. A person who is looking for work in the winter because they have a summer lawn mowing business.
9. When nominal GDP increases and real GDP does not change, we can say:
- A. The price level fell during this time period.
  - B. The price level increased during this time period.
  - C. Aggregate output decreased during this time period.
  - D. Aggregate output increased during this time period.
10. Given the nominal interest rate on a loan, when inflation is lower than anticipated:
- A. The nominal value of the loan will decrease.
  - B. The nominal value of the loan will increase.
  - C. Real wealth will be transferred from the borrower to the lender.
  - D. Real wealth will be transferred from the lender to the borrower.
11. All of the following will increase potential output except:
- A. Increases in human capital (education).
  - B. Increases in the demand for labor.
  - C. Increases in the supply of labor.
  - D. None of the above.

12. Which of the following is NOT included in the consumption portion of GDP?
- A. The total value of new home construction.
  - B. The total value of a household's spending on food.
  - C. The total value of food products that farm families produce and consume themselves.
  - D. The total value of shelter provided by homes that are owned by the families living in them.
13. For purposes of calculating the unemployment rate, a person works for 2 hours and receives a pay check:
- A. Is not included in the labor force.
  - B. Is not included in the working population.
  - C. Is not counted as being unemployed.
  - D. Is counted as being unemployed.
14. GDP is \$5 trillion. Using the expenditure approach, if consumption is \$4.1 trillion, investment is \$1.1 trillion, and government purchases are \$1.8 trillion then
- A. Imports exceed exports by \$2 trillion.
  - B. Exports exceed imports by \$2 trillion.
  - C. Exports are equal to \$2 trillion.
  - D. Net Exports are equal to \$2 trillion.
15. The natural rate of unemployment is also referred to as full employment, this occurs in the United States when:
- A. There is no structural unemployment
  - B. There is no cyclical unemployment.
  - C. There is no seasonal unemployment.
  - D. There is no frictional unemployment.
16. Doctors on average received wages of \$100,000 per year in 1983. In 1998, the average nominal wage of doctors was \$160,000. If 1983 is the base year and if the CPI in 1998 was 163, this implies:
- A. The nominal wage of doctors on average decreased between 1983 and 1998.
  - B. The real wage of doctors on average remained constant between 1983 and 1998.
  - C. The real wage of doctors on average increased between 1983 and 1998.
  - D. The real wage of doctors on average decreased between 1983 and 1998.
17. The CPI in 1995 is 152.4. If your nominal monthly income is \$4,000, what is the real value of your monthly income relative to the base year?
- A. \$6,250
  - B. \$4,000
  - C. \$3,810
  - D. \$2,625
18. When would you most prefer to be a lender, rather than a borrower?
- A. If the nominal interest rate is 10% and the rate of inflation is 8%.
  - B. If the nominal interest rate is 8% and the rate of inflation is 10%.
  - C. If the nominal interest rate is 12% and the rate of inflation is 8%.
  - D. If the nominal interest rate is 12% and the rate of inflation is 13%.

**Short Answers:**

19. **(2 points each)** State which of the following would be included in GDP for 2003, *and if it counts* what component of the expenditure approach it would count as:
- a. A Chevrolet Corvette produced in 2003 that did not sell in 2003.
  
  - b. The purchase of a private education.
  
  - c. The purchase of a government bond for a household's retirement.
20. **(5 points)** In your own words, explain the difference between a stock and a flow variable. Provide one example.
21. **(5 points)** Do you think our current unemployment rate understates or overstates unemployment? Explain why you think this way.
22. **(5 points)** Explain three possible trade-offs associated with increasing economic growth.
23. **(5 points)** What are the distinctions between the two price indices we discussed in class? Why are price indices important, what do we use them for?

**Longer Problems (10 points each)** Use the back of the page if you need more room. Be complete, but as brief as possible.

24. Use the following table showing the production of 500 Cheerios cereal to calculate the contribution to GDP using the VALUE-ADDED approach. Fill in the table (8 points) – value added and cost of materials

<i>Participants</i>	<i>Cost of Materials</i>	<i>Values of Sales</i>	<i>Value Added</i>
Farmer	\$ 0	\$ 100	
Mill		\$ 300	
Cereal Maker		\$ 650	
Wholesaler		\$ 750	
Grocery Store		\$ 1000	

What is the contribution to GDP for the production of those Cheerios (2 points)?

25. Given the annual values of a given market basket of goods and services, compute the price index assuming the base year is year 3 (fill in the blanks on the table – 5 points).

<i>Year</i>	<i>Current Value of Market Basket</i>	<i>Price Index (base year 3)</i>
1	\$ 20,000	
2	\$ 25,000	
3	\$ 28,000	
4	\$ 30,000	
5	\$ 33,500	
6	\$ 38,000	

Determine the rate of inflation from the price index values above: (1 point each)

- From year 1 to year 2 \_\_\_\_\_%
- From year 2 to year 3 \_\_\_\_\_%
- From year 3 to year 4 \_\_\_\_\_%
- From year 4 to year 5 \_\_\_\_\_%
- From year 5 to year 6 \_\_\_\_\_%